

COLORADO 800Mhz

PUBLIC SAFETY MUTUAL AID

GUIDELINES

FCC

PART 90--PRIVATE LAND MOBILE RADIO SERVICES Subpart B--Public Safety Radio Pool Sec. 90.16. The Commission has established a National Plan, which specifies special policies and procedures governing the Public Safety Pool (formally Public Safety Radio Services and the Special Emergency Radio Service). The National Plan is contained in the Report and Order in General Docket No. 87-112. The principal spectrum resource for the National Plan is the 821-824 MHz and the 866-869 MHz bands. The National plan establishes planning regions covering all parts of the United States, Puerto Rico, and the U.S. Virgin Islands. The Commission has accepted the regional 7 plan for Colorado.

The National Public Safety Planning Advisory Committee (NPSPAC) has specified specific channel assignments in the 800Mhz band for mutual aid. The FCC for nationwide allocation of the NPSPAC channels adopted this technique.

REGION 7 PLAN MUTUAL AID CHANNELS

Regional Interoperability for Common Channels

In accordance with the National Plan for 821-824/866-869 MHz, interoperability among federal, state, and local governments during both routine and disaster operations will take place primarily on the five Common Channels as identified in the National Plan. Additionally, through the use of S-160 or equivalent agreements, a licensee may permit federal use of a non-federal communications system. Such use, other than the five Common Channels, is to be in full compliance with the Commission's requirements for government use of not-government frequencies (Title 47 CFR, Sec. 2.103).

Licensees are allowed to count as additional loading, a factor of two percent for federal interoperability agreements. With respect to the NPSPAC plan for region 7, no other channels other than the five national Common Channels, plus the Statewide Tactical channels are authorized to meet this region's interoperability requirement.

Common Channel Implementation

The implementation of the common channels designated by the National Plan will be separated into two categories of users primary and secondary.

1) Primary User: A Primary User is an agency that operates on five (5) or more channels. The Primary User will be required to have the capability of operating on the Regional Calling Channel. The Calling Channel will be implemented as a full mobile relay. Wide area coverage transmitters will be installed to maximize regional coverage.

Primary users may be required to provide satellite receiver feeds into this wide area transmitter's area of coverage. A watch will be maintained on this channel using control stations. Any or all agencies in the Regional Planning area may be required to operate a control station for the purpose of monitoring and rendering assistance on the Calling Channel. Each Primary User may be required to provide sufficient satellite receivers for in-street mobile coverage within their system area. All licensees are encouraged to operate additional stations on any or all of the four-(4) remaining Common Channels.

Tactical Channels will be geographically assigned throughout the region. Each Primary User will be required to sponsor, individually or jointly, one or possibly two localized mobile relays to cover specific geographic areas, in order to provide a fixed number of working channels in an area. Depending upon the needs in an area, multiple channels could be implemented. The placement and coverage of these systems will be controlled by the Regional Review Committee to permit frequency reuse within the Region. Talk-around on all four tactical channels will provide additional on-scene communications to supplement the localized mobile relay. In addition, talk-around will also provide on-scene communication in areas where there exists no localized mobile relay.

2) Secondary User: A Secondary User is an agency that will operate on four (4) channels or less. All Secondary Users shall, as a minimum, operate a base station for continuous monitoring of the National Calling Channel. All Secondary Users shall maintain a radio watch for the purpose of monitoring and rendering assistance on the Calling Channel.

A secondary user whose area is encompassed by a primary user may apply for a waiver from the Regional Review Committee for full time monitoring of the National Calling Channel. The secondary user will be required to have a station of the National Calling Channel.

Users of these channels include federal, state, and local disaster management agencies; police, fire, and providers of basic and advanced life support services. Other eligible, such as school buses, volunteer emergency corps, Red Cross, Radio Amateur Civil Emergency Service (RACES), Amateur Radio Emergency Services (ARES), Salvation Army, etc., under the National Plan may also participate on a secondary basis in support of the preservation of life and property during an emergency.

These eligible may be called upon by the controlling agency when specifically enrolled in a documented emergency plan of a recognized emergency management agency.

The use of automatic or operator-assisted connection of these Common Channels the switched telephone network is prohibited, without a specific waiver from the Regional Review Committee.

Calling Channel

The calling channel shall be used to contact other users in the Region for the purpose of requesting incident related information and assistance. This channel shall not be used as an ongoing working channel. Once contact is made, an agreement upon which tactical channel to use is recommended for continued communications.

Tactical Channels (TAC1 - TAC4, STAC5)

TAC1-4 channels are reserved for use by those agencies in need of conducting inter-agency communications. Incidents requiring multi-agency participation will be coordinated over these channels by the agency controlling the incident. Individual tactical channels may be designated for use by various services on an incident basis by the controlling agency. In the event of multiple incidents requiring the use of these channels, channels shall be designated by mutual agreement between controlling agencies. STAC5 is intended to be used at low power for SWAT, DIVE teams, etc. Portable repeaters are also allowed at low power operation. ***In no case shall control of these channels remain with any single agency beyond the termination of a declared emergency.***

Channel Use

Plain language will be used on all five Common Channels at all times, and the use of unfamiliar terms, phrases or codes will be kept to a minimum, unless deemed necessary for security purposes. The use of these channels for intra-system normal dispatch and routine agency operations is strictly prohibited. Normally, the five Common Channels are to be used only for activities requiring communications between agencies not sharing any other compatible communication system. ***Under emergency situations, one or more Tactical Channels may be assigned by the controlling agency at the time of the incident.***

CTCSS Tone Requirement

All mobile and portable radios operating in the 821-824/866-869 MHz band shall be equipped to operate on the five Common Channels using CTCSS tone squelch of 156.7 Hz. All mobile relay base stations operating on these common channels shall be equipped to operate using CTCSS tone squelch of 156.7 Hz. They shall be equipped to operate as a mobile relay station on demand, but shall normally operate in the repeat disable mode.

Network Operating Method

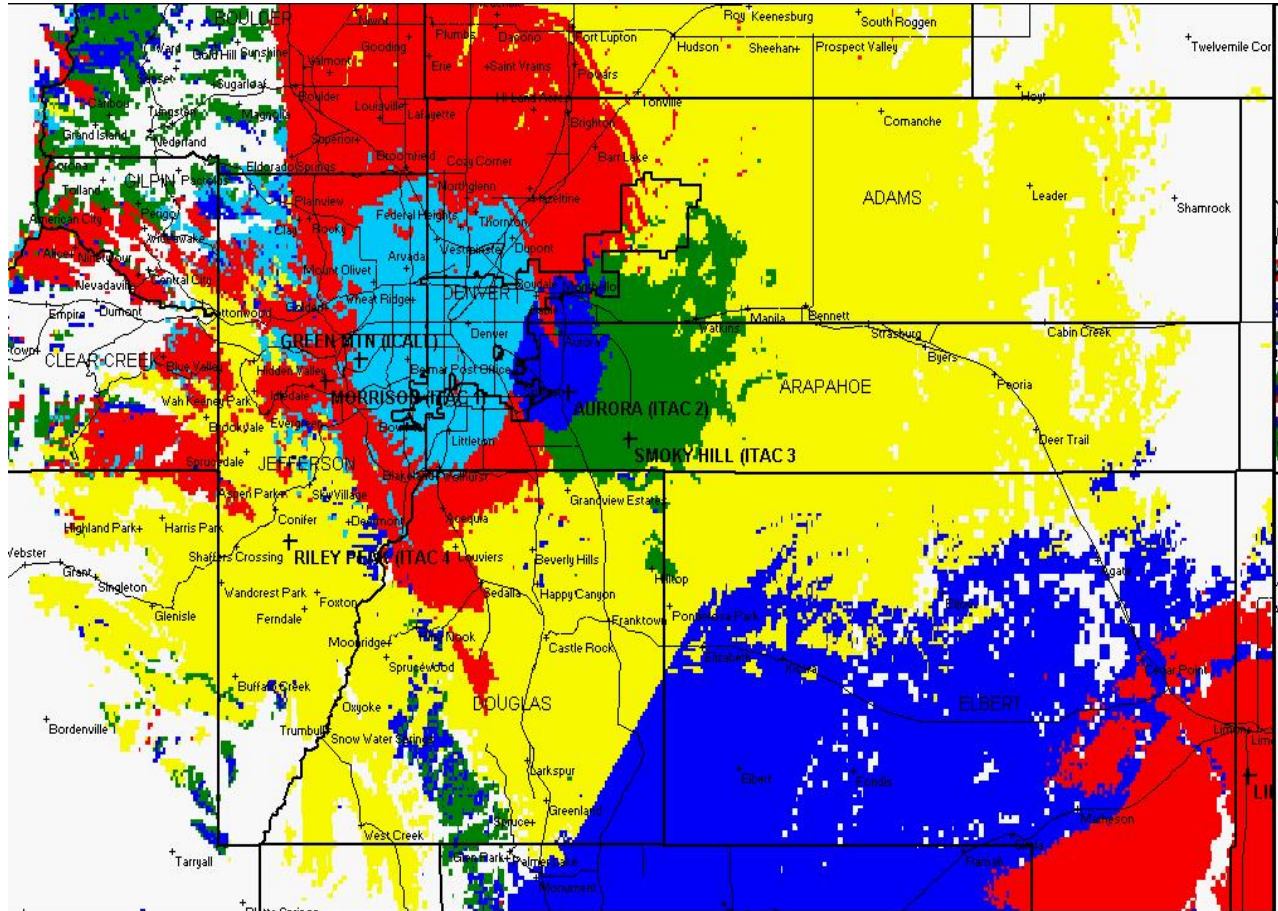
A network will be established on the calling channel, "Call". This network will be wide area to cover large sections of the Region. Multiple networks may be required to fully cover the out-lying areas of the Region.

Primary Users are required to have the capability of operating on the Calling Channel. Secondary Users are required to have the capability of monitoring the Calling Channel. Communications systems on TAC 1 - TAC 4 will be implemented by agencies on a voluntary basis.

Every primary geographic section of the Region is intended to be covered by at least one of the working channels. In secondary areas Common Channels will be utilized through mobile-to-mobile talk-around. Mobile relays on TAC 1 - TAC 4 will be on a limited coverage design to permit reuse of the channel several times within the Region and in adjacent regions.

Designator	Color	Primary Use	Base Freq.	Mobile Offset
ICALL	Light Blue	Calling	866.0125	-45 MHz
Located at: (Lakewood Green Mtn, Westminster Guy Hill, El Paso County Stanley Peak)				
ITAC-1	Red	Mutual Aid #1	866.5125	-45 MHz
Located at: (Denver Mount Morrison, Pueblo, Limon & Sterling)				
ITAC-2	Blue	Mutual Aid #2	867.0125	-45 MHz
Located at: (Arapahoe Chevron Bldg, Aurora Parker Rd & Hampton, Trinidad, Larimer County Horsetooth, El Paso County Stanley Peak)				
ITAC-3	Green	Mutual Aid #3	867.5125	-45 MHz
Located at: (Jefferson County Smoky Hill, Greeley, El Paso County Pitts Peak, Sterling)				
ITAC-4	Yellow	Mutual Aid #4	868.0125	-45 MHz
Located at: (Jefferson County Riley Peak, Lamar, La Junta, Cheyenne WY)				
STAC-5		Portable/Mobile	868.7875	-45 MHz
Located at: (Base to Base, Base to Mobile, Mobile to Mobile Statewide)				

METRO DENVER ITAC COVERAGE



Note: Future ITAC repeaters are scheduled for Western Colorado. Other ITAC repeaters are currently operating in Northern & Southern Colorado and a coverage map for them is being developed.